



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

OCT 12 2018

Hope A. Smythe, Executive Officer  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, California 92501-3348

Subject: Approval of the Amendments to the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to Revise Beneficial Uses, Definitions, Antidegradation Targets, and Make Other Editorial Changes Related to Newport Bay.

Dear Ms. Smythe:

I am pleased to approve the subject amendments that address bacteria impairment and other revisions and editorial changes to the Basin Plan. The amendments are consistent with the requirements of Clean Water Act section 303(c) and the EPA's implementing regulations at 40 CFR § 131 including public notice requirements at 40 CFR § 131.20. The rationale for the approval is enclosed.

Today's approval includes: the addition of new surface water bodies to Table 3-1 (Beneficial Uses) and Table 4-1 (Water Quality Objectives); the addition of designated beneficial uses for new water bodies added to Table 3-1; the addition of designated beneficial uses to water bodies already listed in Table 3-1; a revised definition of the SHEL beneficial use; the addition of numeric *E. coli* bacteria antidegradation targets for non-contact water recreation (REC2) in Temescal Creek – Reach 1b, Santa Ana-Delhi Channel – Reach 1, and Cucamonga Creek – Reach 1; and the addition of a fecal indicator bacteria footnote to Chapters 4 and 5. The State has also provided adequate opportunities for public review and comment on these amendments.

I look forward to our continued partnership to protect water quality improvements in the Santa Ana River Basin and Newport Bay. Please call me at (415) 972-3337 if you would like to discuss this further or your staff may contact Daniel Oros of the Water Quality Assessment Section at (415) 972-3583 for specific questions concerning this approval.

Sincerely,

Tomás Torres  
Director, Water Division

October 12, 2018

Enclosure

cc: Rebecca Fitzgerald, SWRCB  
Lauma Willis, Santa Ana RWQCB

## Enclosure

### **EPA Review of Santa Ana Regional Water Quality Control Board Water Quality Standards and Beneficial Uses Amendments**

#### **I. Background**

The subject amendment was adopted by the Santa Ana Regional Water Quality Control Board (Regional Board) on June 16, 2017 under Resolution No. R8-2017-0019, adopted by the State Water Resources Control Board (State Board) on February 6, 2018 under Resolution No. 2018-0007, and was certified by the California Office of Administrative Law on September 24, 2018 (OAL Matter #2018-0813-02). The main submission package was received by EPA Region 9 on July 27, 2018. EPA considers the State's submittal complete as of the date of receipt of the full submittal, October 1, 2018.

The amendment makes various revisions to the Basin Plan in Chapter 3 (Beneficial Uses) and Chapter 4 (Water Quality Objectives). The Basin Plan amendment also includes other editorial changes such as a revision of chapter numbering, addition of a footnote into tables, and "clarifying" language revisions.

Pertinent changes that are under the authority of CWA section 303(c) include: the addition of new surface water bodies to Table 3-1 (Beneficial Uses) and Table 4-1 (Water Quality Objectives); the addition of designated beneficial uses for new water bodies added to Table 3-1; the addition of designated beneficial uses to water bodies already listed in Table 3-1; a revised definition of the shellfish harvesting (SHEL) beneficial use; the addition of numeric bacteria antidegradation targets for non-contact water recreation (REC2) in Temescal Creek – Reach 1b, Santa Ana-Delhi Channel – Reach 1, and Cucamonga Creek – Reach 1; and the addition of a fecal indicator bacteria footnote to Chapters 4 and 5.

#### **II. Basis for Revisions**

Section 303(c) of the federal Clean Water Act (CWA) requires that states hold public hearings for review of water quality standards (beneficial uses, water quality objectives, and antidegradation policy) at least once every three years. As part of the 2015 Triennial Review for the Basin Plan, the Regional Board approved the 2015 Triennial Review Priority List and Work Plan, which included issues to be addressed during fiscal years (FY) 2015-2018 in compliance with federal and state requirements for periodic review of water quality standards and water quality control plans. The Basin Plan amendments included here address the major priorities identified during the 2015 Triennial Review.

#### **III. Amendments Pertaining to Beneficial Uses**

**Revise SHEL Beneficial Use Definition:** The Staff Report (p. 43) states that the revision of the SHEL definition is necessary to assure consistency with the statewide definition. The changes to the SHEL definition include the following:

*Shellfish Harvesting (SHEL) – waters support habitats necessary for filter feeding shellfish (e.g., clams, oysters, ~~limpets, abalone, shrimp, crab, lobster, sea urchins,~~ and mussels) collected for human consumption, commercial or sports purposes.*

EPA finds the revision to the SHEL beneficial use definition is appropriate and is consistent with the statewide definition of SHEL.

**Add Certain Waters to Tables 3-1 and 4-1, and Designate Beneficial Uses for Those and Other**

**Select Waters:** The Staff Report (p. 6) states that 15 new surface water bodies and new beneficial uses are added to Basin Plan Table 3.1 and Table 4-1. Table 3-1 in Chapter 3 (BENEFICIAL USES) lists the Region's water bodies and the beneficial uses designated for those water bodies. The Basin Plan recognizes twenty beneficial uses that are designated as existing or potential. Table 4-1 in Chapter 4 (WATER QUALITY OBJECTIVES) lists the Region's water bodies and identifies narrative and numeric water quality objectives for those water bodies.

All new surface water bodies are designated as REC1; and one or more of the following aquatic habitat-related beneficial uses are also added: Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Marine Habitat (MAR), Spawning, Reproduction, and Development (SPWN), and Estuarine Habitat (EST). Table 1 below contains 15 new water bodies added to Basin Plan Table 3-1 and Table 4-1 (see Staff Report, Table 1, p. 33).

**Table 1: WATERBODIES and DESIGNATED USES PROPOSED TO BE ADDED TO  
TABLE 3-1**

WATERBODY	BENEFICIAL USES
Muddy Canyon Creek	+MUN, I REC1, REC2, I WARM, WILD, RARE
Los Trancos Creek	+MUN, I REC1, REC2, I WARM, WILD
Morning Canyon Creek	+MUN, REC1, REC2, WARM, WILD
Buck Gully Creek	+MUN, REC1, REC2, WARM, WILD
Big Canyon Creek	+MUN, REC1, REC2, WARM, WILD, RARE
Carbon Creek	I MUN, GWR, I REC1, REC2, I WARM, WILD
Fullerton Creek	+MUN, I REC1, REC2, I WARM, WILD
Brea Creek	I MUN, I REC1, REC2, I WARM, WILD, RARE
Prado Park Lake	+MUN, REC1, REC2, COMM, WARM, WILD
Mil/Cucamonga Creek Wetlands	+MUN, REC1, REC2, WARM, WILD, RARE
Goldenstar Creek	MUN, REC1, REC2, WARM, WILD, SPWN, RARE
Hole Lake Creek	+MUN, REC1, REC2, WARM, WILD
Warm Creek	+MUN, REC1, REC2, WARM, WILD
Gunnerson Pond Wetlands	+MUN, REC1, REC2, WARM, WILD, RARE
Perris Valley Channel	+MUN, I REC1, REC2, I WARM, WILD, RARE

I = Intermittent Beneficial Use; X= Existing or Potential Beneficial Use  
+ = Excepted from MUN

The Staff Report also states that new beneficial use designations are to be added to certain surface waters already listed in the Basin Plan Table 3-1 (see Staff Report, Table 2, p. 41). Detailed explanations of the reason for adding a new beneficial use to a water body are provided (see Staff Report, p. 34-43). The water bodies and their new beneficial use designations include the following:

- 1) Coldwater Canyon Creek: *add SPWN beneficial use*
- 2) Lake Elsinore, Big Bear Lake, Lee Lake, Lake Perris, Lake Hemet, Canyon Lake, Jenks Lake, Prado Lake and Lake Evans: *add COMM beneficial use*
- 3) Los Cerritos Wetlands, Huntington Beach Wetlands, Greenville-Banning Channel Tidal Prism Reach, San Diego Creek, Santa Ana-Delhi Channel, Santa Ana River Tidal Prism, Tidal Prisms of Flood Control Channels, and San Diego Creek: *add EST beneficial use*
- 4) Lytle Creek and Cajon Canyon Creek, Valley Reaches: *add RARE beneficial use*
- 5) Santa Ana River Reach 2, 17th Street in Santa Ana to Prado Dam: *add SPWN beneficial use*
- 6) Santa Ana River, Reach 6, Seven Oaks Dam to Headwaters; *add RARE beneficial use*
- 7) Shay Creek: *add SPWN beneficial use*
- 8) Lytle Creek (South, Middle, and North Forks): *add SPWN beneficial use*
- 9) Tequesquite Arroyo and Anza Park Drain: *add RARE beneficial use*
- 10) San Jacinto River, Reaches 1, 3, 4, 5, and 6 *add RARE beneficial use*
- 11) San Jacinto River, Reach 7: *add RARE and SPWN beneficial uses*
- 12) Strawberry Creek and San Jacinto River, North Fork: *add RARE and SPWN beneficial uses*
- 13) Fuller Mill Creek and Stone Creek: *add RARE beneficial use*
- 14) Indian Creek: *add SPWN and RARE beneficial uses*
- 15) Plunge Creek: *add SPWN beneficial use*
- 16) Lake Hemet, Lake Perris, and Irvine Lake: *add RARE beneficial use*
- 17) Shay Meadows Wetlands: *add RARE and SPWN beneficial uses*
- 18) Bautista Creek: *add RARE beneficial use*
- 19) Silverado Creek and Santiago Creek, Reach 3: *add RARE beneficial use*
- 20) Santiago Creek, Reach 4: *add RARE beneficial use*
- 21) San Diego Creek, Reach 1: *add RARE beneficial use*
- 22) Coyote Creek: *add RARE beneficial use*
- 23) Mill Creek, Reach 2: *add RARE beneficial use*
- 24) Bear Creek: *add RARE beneficial use*
- 25) Meadow Creek, Minnelusa Creek, Red Ant Creek and Summit Creek: *add RARE beneficial use*
- 26) Cucamonga Creek, Reach 2: *add RARE beneficial use*
- 27) Yucaipa Creek; Temescal Creek, Reach 2; San Timoteo Creek, Reaches 1b, 2, and 3; San Diego Creek, Reach 2; Potrero Creek; Peter's Canyon Wash; Hicks Canyon Wash, Rattlesnake Canyon Wash; Little Sand Canyon; Sand Canyon Wash, Laguna Canyon Wash; Devil Canyon Valley and Mountain Reaches; Serrano Creek, West Fork Cable Canyon; Borrego Canyon Wash; Agua Chinon Wash; Laguna Canyon Wash; Bailey Canyon Creek; Bonita Creek; Black Star Creek; Bee Canyon Creek; Bedford Canyon Creek; Badger Creek: *add RARE beneficial use*
- 28) Poppet Creek: *add RARE beneficial use*
- 29) Peter's Canyon, Rattlesnake, Sand Canyon, and Siphon Reservoirs: *add Rare beneficial use*
- 30) Metcalf Creek: *add RARE beneficial use*
- 31) This Item # Is Not Provided – (see Staff Report, p. 40)
- 32) Lake Elsinore: *add RARE and COMM beneficial uses*

EPA finds the addition of certain water bodies to Table 3-1 and Table 4-1 and to designate new beneficial uses for those and other select water bodies are appropriate and protective of the assigned beneficial uses.

Table 2: WATERS PROPOSED TO HAVE ADDED DESIGNATIONS OF RARE, COMM, EST, AND SPWN BENEFICIAL USES

WATERBODY	RARE Species (Rare, Threatened or Endangered)
Lyle and Cajon Canyon Creeks Valley Reach	San Bernardino Kangaroo Rat, Santa Ana Woolly Star
Santa Ana River, Reach 6	Santa Ana Woolly Star, California Dandelion, Parish's Checkerbloom
Tequesquite Arroyo and Anza Park Drain	Santa Ana Sucker
San Jacinto River, Reach 1	Least Bell's Vireo, California Orcutt Grass
San Jacinto River, Reach 3	Least Bell's Vireo, Spreading Navarretia,
San Jacinto River, Reach 4	Least Bell's Vireo, Spreading Navarretia, San Jacinto Valley Crownscale
San Jacinto River, Reach 5	Least Bell's Vireo, San Bernardino Kangaroo Rat, Mojave Tarplant
San Jacinto River, Reach 6	Least Bell's Vireo, San Bernardino Kangaroo Rat, Mojave Tarplant
San Jacinto River, Reach 7	Least Bell's Vireo
Strawberry Creek and San Jacinto River, North Fork	Mountain Yellow-Legged Frog
Fuller Mill Creek and Stone Creek	Mountain Yellow-Legged Frog, Mojave Tarplant
Indian Creek	Santa Ana Speckled Dace, San Bernardino Kangaroo Rat, Mojave Tarplant
Lake Hemet, Lake Perris, Lake Irvine	Bald Eagle
Shay Meadows (Wetlands)	Unarmored Threespine Stickleback, California Dandelion
Bautista Creek	San Bernardino Kangaroo Rat, Arroyo Toad, Southern Willow Flycatcher, Slender-horned Spineflower
Sanliago Creek, Reach 3	Arroyo Toad, Least Bell's Vireo
Sanliago Creek, Reach 4	Santa Ana Speckled Dace, Western Pond Turtle
Silverado Creek	Arroyo Toad, Western Pond Turtle
Black Star Creek	Least Bell's Vireo
Poppet Creek	San Bernardino Kangaroo Rat

Yucaipa Creek, Temescal Creek Reach 2, San Timoteo Creek Reaches 1b, 2, 3, San Diego Creek Reaches 1 and 2, Potrero Creek, Peter's Canyon Wash, Rattlesnake Canyon Wash, Little Sand Canyon, Laguna Canyon Wash, Devil Canyon Valley and Mountain Reaches, West Fork Cable Canyon, Borrego Canyon Wash, Bailey Canyon Creek, Bonita Creek, Black Star Creek, Bee Canyon Creek, Bedford Canyon Creek, Badger Creek	Least Bell's Vireo
Peters Canyon, Rattlesnake, Sand Canyon, and Siphon Reservoirs	Least Bell's Vireo and tricolored blackbird
Brea Creek and Coyote Creek	Western Pond Turtle
Mill Creek, Reach 2	Mountain Yellow-legged Frog, South Western Willow Flycatcher,
Bear Creek	South Western Willow Flycatcher
Metcalf Creek	Southern Western Willow Flycatcher
Metcalf, Meadow, Summit, Minnelusa, Red Ant Creeks, Shay Meadows	San Bernardino (Bear Valley) Blue-grass, California Dandelion, Bird-foot Checkerbloom
Lake Elsinore	Riverside Fairy Shrimp, Least Bell's Vireo
Mill/Cucamonga Creek Wetlands	Least Bell's Vireo
Cucamonga Creek Reach 2	Arroyo Toad
San Diego Creek Reach 1	Belding's Savannah Sparrow, Ridgeway Rail, Least Tern, Western Pond Turtle

WATERBODY (SPWN proposed to be added)	SPWN (Spawning, Reproduction and Development) Species
Coldwater Canyon Creek	Southern California Steelhead/Rainbow Trout
Santa Ana River, Reach 2	Santa Ana Sucker
Shay Creek	Unarmored Threespine Stickleback
Lyle Creek (South, Middle, and North Forks)	Rainbow Trout, Santa Ana Speckled Dace
San Jacinto River, Reach 7	Rainbow and Brown Trout
Strawberry Creek and San Jacinto River, North Fork	Rainbow Trout
Indian Creek	Santa Ana Speckled Dace
Shay Meadows Wetlands	Unarmored Threespine Stickleback
Plunge Creek	Santa Ana Speckled Dace

WATERBODY(COMM proposed to be added)	COMM DESIGNATION (Commercial and Sportfishing)
Lake Elsinore, Big Bear Lake, Lee Lake, Lake Perris, Canyon Lake, Jenks Lake, Lake Evans, Prado Lake	COMM
WATERBODY(EST proposed to be added)	EST DESIGNATION (Estuarine Habitat)
Los Cerritos Wetlands, Huntington Beach Wetlands, Greenville-Banning Channel Tidal Prism Reach, San Diego Creek (near bay), Santa Ana-Delhi Channel Tidal Prism, Santa Ana River Tidal Prism, Tidal Prisms of Flood Control Channels	EST

#### IV. Amendments Pertaining to Water Quality Objectives

**Add Antidegradation Targets for Non-Contact Water Recreation (REC2) Only Waters:** The Staff Report (p. 44) states that antidegradation targets for *E. coli* are being recommended for Santa Ana Delhi Channel - Reach 1, Temescal Creek - Reach 1b, and Cucamonga Creek - Reach 1, which are designated as REC2 only waters (see Staff Report, Table 5-REC2 Only Targets-FW, p. 44). The proposed antidegradation targets are the following:

Table 5-REC2 Only Targets-FW below shows the recommended targets. Deletions are in strike-out, additions are underlined.

Table 5-REC2 Only Targets-FW					
REC2 Only Waterbody	<i>E. coli</i> Densities (cfu/100 mL)				
	Geometric Mean	Std. Dev.	N	Max. Observed	75%
Temescal Creek, Reach 1a <u>and 1b</u>	492 <u>353</u>	34-1.1	408 <u>36</u>	9,200	<u>359</u> <u>725</u>
Santa Ana-Delhi Channel, <u>Reach 1 and Reach 2</u>	444- <u>399</u>	440 <u>1.5</u>	66 <u>55</u>	12,590	<u>4,104</u> <u>1,067</u>
<u>Cucamonga Creek Reach 1</u>	<u>509</u>	<u>1.5</u>	<u>197</u>	<u>23,000</u>	<u>1,385</u>

To assure that bacteria conditions in REC2 waters do not degrade as the result of controllable water quality factors, the Regional Board established antidegradation targets to be consistent with antidegradation policy requirements. The addition of antidegradation pathogen indicator bacteria targets is consistent with Basin Plan requirements already identified in the Basin Plan (CHAPTER 5 IMPLEMENTATION, Recreation Water Quality Standards, *Antidegradation Targets for REC2 Only Waters*). These bacteria targets serve as triggers for further investigation and monitoring in these waters and for control actions where warranted by the data.

EPA finds the addition of antidegradation targets for non-contact recreation (REC2) only waters for the Santa Ana Delhi Channel - Reach 1, Temescal Creek - Reach 1b, and Cucamonga Creek - Reach 1 is protective of the REC2 beneficial use in these water bodies.

**Add Fecal Indicator Bacteria Footnote to Chapters 4 and 5:** The Staff Report (p. 49) states that the footnote will note that all the fecal indicator units (cfu/100 mL and MPN/100 mL) are considered equivalent measures of bacteria concentration. For clarity to those using or referring to the Basin Plan, the following footnote would be placed in Chapter 4 on the Pathogen Indicator Bacteria objective for Bays and Estuaries page, and in Chapter 5, on the Table 5-REC2 Only Targets-FW page. The footnote (see Staff Report, p. 49) is the following:

*“Objectives, targets, and TMDL and/or Waste Load Allocations listed in the Basin Plan that are associated with bacteria are expressed with different units (i.e., organisms, colony forming units [cfu], or most probable number [MPN] /100 mL). “CFU” and “MPN” represent units specific to analytical techniques used to quantify bacteria concentration, whereas “organisms” is a generic term used to express bacteria concentration. All unit expressions are considered equivalent measures of bacteria concentration (see Protocol for Developing Pathogen TMDLs, USEPA 2001, Office of Water, EPA 841-R-00-002 p 2-1).”*

EPA finds the addition of a footnote to Chapters 4 and 5, which notes that all the fecal indicator units (cfu/100 mL and MPN/100 mL) are considered equivalent measures of bacteria concentration, will provide clarity and improve understanding of the bacteria water quality objectives as explained in the Basin Plan.

## **V. ESA Consultation and Water Quality Standards Approvals**

EPA’s *Recommended Approaches to Improve Endangered Species Act (ESA) Consultation on Approvals on State and Tribal Water Quality Standards*, dated January 16, 2009, states that ESA consultation requirements do not apply to actions where EPA lacks discretion to protect species, or where an EPA action has no effect on listed species or critical habitat. In order for ESA Section 7 to apply, EPA must be taking an action in which it has sufficient discretionary federal involvement or control to protect listed species. EPA has concluded that it lacks sufficient discretionary federal involvement or control to protect listed species when it approves state water quality standards actions to protect human health. Human health standards are designed to protect humans, not plants or animals. EPA has no discretion to revise an otherwise approvable human health standard to benefit listed species. Therefore, ESA consultation requirements do not apply to the SHEL, REC1, and REC2 standards. Since the SHEL, REC1, and REC2 uses are intended to protect humans, ESA consultation requirements do not apply. Other revisions, e.g., designating other uses such as RARE, COMM, EST, and SPWN to water bodies, are not likely to adversely affect ESA listed species.

## **VI. EPA’s Assessment of the Basin Plan Amendments**

The EPA concludes that the Regional Board has provided reasonable explanations to support the recommended amendments to the Basin Plan. The Regional Board’s modifications to the designated beneficial uses and water quality objectives specified in the Basin Plan are based on new data and analysis and current statewide policies.